AMENDMENTS TO THE CLAIMS

Please amend, without prejudice, the claims as set forth in the following listing of claims, which replaces all prior versions of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A method for manufacturing optical preforms, in which one or more layers of glass, doped or undoped, are deposited onto the internal surface of a hollow substrate tube, which deposition is effected by supplying one or more reactive gas mixtures of glass-forming compounds to the interior of the hollow substrate tube and subsequently generating a non-isothermal plasma in the hollow substrate tube, after which the hollow substrate tube provided with layers of glass via a deposition process is subjected to a contraction process for the purpose of forming a massive rod, from which optical fibres are drawn, characterized in that the contraction process comprises the steps of:

i) providing a hollow substrate tube enveloped by a protective tube, which protective tube is stationary with respect to the hollow substrate tube, with the hollow substrate tube being enveloped by the protective tube along substantially the entire length thereof,

ii) providing a resonator which surrounds the protective tube,

iii) supplying a plasma-forming gas to the annular space present between the outer circumference of the hollow substrate tube and the inner circumference of the protective tube,

iv) generating a non-isothermal plasma in said annular space,

v) reciprocating the resonator in a longitudinal direction with respect to the protective tube for the purpose of contracting the hollow ~~preform~~ substrate tube into a massive rod.

Claim 2. (original) A method according to claim 1, characterized in that the hollow substrate tube and the protective tube are kept in a horizontal position while steps i)-iv) are being carried out.

Claim 3. (previously presented) A method according to claim 1 or claim 2, characterized in that the hollow substrate tube is rotated during step v), followed by controlled cooling thereof.

Claim 4. (previously presented) A method according to claim 1, characterized in that the plasma is adapted to the increased volume of the annular space during step v).

Claim 5. (previously presented) A method according to claim 1, characterized in that a mixture of argon and oxygen is used as a plasma-forming gas.

Claim 6. (previously presented) A method according to claim 1, characterized in that the pressure during the contraction process is <50 mbar.

Claim 7. (previously presented) A method according to claim 1, characterized in that a gas having a high temperature during the deposition process is introduced into said annular space.

Claim 8. (previously presented) A method according to claim 1, characterized in that the protective tube is made of a ceramic material having a higher plasticizing temperature than the material of the hollow substrate tube to be contracted.

Claim 9. (previously presented) A method according to claim 1, characterized in that the contraction process comprises an additional step vi), which step vi) comprises the reciprocating of the resonator in longitudinal direction with respect to the protective tube for the purpose of contracting the protective tube.

Claim 10. (previously presented) A method according to claim 1, characterized in that the protective tube is provided with cooling means.

Claim 11. (previously presented) A method according to claim 1, characterized in that the deposition process and the contraction process are carried out in the same device.

Claim 12. (canceled)

Claim 13. (previously presented) A method according to claim 1, characterized in that one or more glass-forming compounds are added to the gas used in step iii).

Claim 14. (previously presented) A method according to claim 1, characterized in that the contraction into a fully massive rod is terminated prematurely in step v), for which contraction the same plasma as used in the deposition process and/or the plasma generated in the annular space may be used.

Claim 15. (previously presented) An optical fibre characterized in that the refractive index contrast

$$\Delta_i = \frac{n_i^2 - n_{cl}^2}{2 \cdot n_i^2} \cdot 100\%$$

wherein:

Δ_i = refractive index contrast of specific layer i,

ni = refractive index of layer i,

n_{cl} = refractive index of the cladding, i.e. the outer layer of the fibre,

has a value according to which $\Delta_i > 3\%$.

Claim 16. (canceled)

Claim 17. (previously presented) An optical fibre, characterized in that in that the thermal coefficient of expansion

$$\alpha = \frac{l}{l_0} \cdot \frac{\Delta l}{\Delta T} [K^{-1}]$$

measured at a temperature of 25-300°C, wherein:

l = length at T_1

l_0 = length at T_0

$\Delta T = (T_1 - T_0)$

$\Delta l = (l - l_0)$

has a value according to which $\alpha > 3.4 \times 10^{-6}\ K^{-1}$.

Claim 18. (previously presented) An optical fibre according to claim 17, characterized in that $\alpha > 4.0 \times 10^{-6}\ K^{-1}$.

Claim 19. (canceled)

Claim 20. (previously presented) A method according to claim 1, characterized in that the pressure during the contraction process is between about 10 mbar and 25 mbar.